

Melwani, A.R., Lowe, S., and Thompson, B.

RMP Technical Review Committee July 9th 2009, Oakland, California





SAN FRANCISCO ESTUARY INSTITUTE

7770 Pardee Lane, Second floor, Oakland, CA 94621 p: 510-746-7334 (SFEI), f: 510-746-7300, www.sfei.org

Benthic Workshop

- 1st Workshop held June 3rd, 2009
- WG consists of 13 members (11 attended 1st workshop)
- Collaboration with SQO Phase II in the Delta
- Long Term Goal: revise/develop benthic assessment methods for several SF Estuary and Delta assemblages
- Immediate Goals:
 - Review spatial and temporal extent of benthic assemblages in the SF Estuary
 - Agree upon assessment methods for development of a mesohaline benthic index

Applicable RMP Management Questions

MQ 1. Are chemical concentrations in the Estuary potentially at levels of concern and are associated impacts likely?

Specific Benthos Question from 5 Year Plan:

 Are the toxicity tests, benthic community assessment approaches, and the overall SQO assessment framework we are using reliable indicators of impacts on benthic biota?

Significant Progress at First Workshop

- Identified benthic assemblages in San Francisco Estuary
 - Updated/standardized SF Estuary benthic data
 - Preliminary classification analysis conducted by SCCWRP
- General agreement by WG on initial benthic assemblage classification in the Estuary
- Planning BPJ exercise to identify benthic response gradients, to support mesohaline index development and validation

**This work is ongoing and being continued in 2009 as recommended by the work group

2009 Q3/Q4 Plans

- Finalize classification analysis
 - Complete data standardization to include habitat variables
- Conduct and evaluate BPJ exercise
 - Identify consensus indicators for mesohaline assessments
- Revise existing mesohaline index or create new index, based on evaluation and testing of benthic indicator metrics related to the BPJ gradient
- 2nd Benthic Workshop scheduled for August 24th, 2009

**Final, validated index expected in 2010

Study 7: Ranked "High" by EEWG

- Continued Participation in SQO assessments for the SF Estuary (\$30K)
- Finalized, validated index for mesohaline habitats
- Other tools in need of revision for ongoing SQO work
 - CSI (SQO chemistry line of evidence)
 - RMP capabilities to perform SQO assessments
- Oversight and guidance by Benthic WG
- RMP MQ 1: which chemicals are associated with impacts
- 5 year plan: are the benthic community assessment approaches and the overall SQO assessment framework we are using reliable indicators of impacts on benthic biota?